

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte PAN-GIE PARK

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Appeal No. 2004-0123  
Application No. 09/118,922

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HEARD: April 27, 2004

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Before BARRETT, LEVY, and BLANKENSHIP, Administrative Patent Judges.

LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-4, 6-13 and 15, which are all of the claims pending in this application.

BACKGROUND

Appellant's invention relates to synchronously decoding picture data and sub-picture data. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced as follows:

1. A method of decoding video data and sub-picture data simultaneously at high speed, comprising:

sequentially searching pictures to be reproduced;

decoding one of the searched pictures;

updating a system clock reference value with a presentation time stamp value of the decoded picture;

displaying the decoded picture;

sequentially searching sub-picture units to be reproduced;

for each sub-picture unit, sequentially searching corresponding sub-picture display control sequences;

comparing a command executing start time for a current display control sequence with the updated system clock reference value; and

skipping the current display control sequence if the updated system clock reference value is greater than the command executing start time, otherwise, waiting until the updated system clock reference value is equal to the command executing start time and then executing the current display control sequence.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Daum et al. (Daum)	5,815,634	Sep. 24, 1998 (filed Dec. 14, 1994)
Tsukagoshi et al. (Tsukagoshi)	5,848,217	Dec. 8, 1998 (filed Jul. 24, 1996)
Fujita	5,930,450	Jul. 27, 1999 (filed Feb. 27, 1996)

Claims 1-4, 6-13 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fujita in view of Daum and Tsukagoshi.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejection, we make reference to the examiner's answer (Paper No. 19, mailed March 11, 2003) for the examiner's complete reasoning in support of the rejection, and to appellant's brief (Paper No. 18, filed December 20, 2002) and reply brief (Paper No. 20, filed May 9, 2003) for appellant's arguments thereagainst. Only those arguments actually made by appellant have been considered in this decision. Arguments which appellant could have made but chose not to make in the brief have not been considered. See 37 CFR 1.192(a).

#### OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the rejection advanced by the examiner, and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, appellant's arguments set forth in the briefs along with the

examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

Upon consideration of the record before us, we reverse. We note at the outset that appellant asserts (brief, page 3) that the claims stand or fall together. Consistent with this statement, appellant presents arguments with respect to claim 1. Accordingly, we consider claim 1 to be representative of the group.

Turning to claim 1, the examiner's position is set forth on pages 3 and 4 of the examiner's answer. The examiner asserts that Fujita does not disclose skipping the DCSQ (dynamic control sequence) if the system clock is greater than the command executing start time. Nor does Fujita disclose decoding video and sub-picture data at high speed. To overcome the deficiencies of Fujita, the examiner turns to Daum for teachings of skipping a display control sequence (or a frame of video) when the system clock is greater than the command executing start time (of the sub-picture). The examiner notes that although the display control sequence in Daum is for video, that it obvious to do the same for sub-picture data, since sub-picture data should be synchronized with the audio. The examiner relies upon Tsukagoshi

for a disclosure of reproducing subtitles (or sub-picture data) in a fast reproduction mode). In addition, the examiner asserts that in Daum, the audio and video presentation stamps are compared to determine a lag time between the video and audio. Daum discloses a lag time of 16.67 ms, and teaches that if the lag time is too long, to skip the video frame in order to keep the video synchronized with the audio. The examiner takes the position that it would have been obvious to set the lag threshold at zero sec. The examiner maintains that if the lag threshold is zero, a display control sequence would be skipped if the SCR exceeded the command executing start time.

Appellant asserts (brief, pages 3-5) that Fujita is related to reproducing sub-picture data with a predetermined time delay after reproduction of the main picture, and that Fujita is related to play back in a modified normal play mode and not in a high speed mode. It is asserted that Daum is directed to synchronizing audio and video by determining whether the video lags the audio, and adjusting the time of the video presentation to correspond with the audio, and that Daum skips or repeats video frames to keep the audio and video synchronized. Appellant argues that Daum is not directed to displaying picture data and sub-picture data in a fast play mode. Appellant asserts that

there is nothing in Daum to suggest that the techniques for synchronizing audio data and video data are applicable to the solution of the problem of simultaneously displaying picture and sub-picture data at high speed, as in the present invention. It is additionally argued that in Tsukagoshi, the subtitles to be displayed in trick play mode are not the same subtitles that would be displayed in normal mode, and that since the subtitles are predetermined to be played back in fast play mode, there would be no reason to skip any of the subtitles since they are already predetermined before playback.

From our review of Fujita, we agree with the examiner that Fujita discloses decoding of a searched picture, updating a system clock reference (SCR) value with a presentation time stamp (PTS); displaying the decoded picture; searching for a sub-picture and comparing a command executing start time for a current display control sequence (DCSQ) with the SCR value, and waiting for the SCR to equal the command executing start time when they are not equal. We further agree with the examiner that Fujita does not disclose skipping the current DCSQ if the system clock is greater than the command executing start time, nor does Fujita disclose decoding video and sub-picture data at high speed. Fujita further discloses that the sub-picture can be

reproduced after a predetermined time delay with respect to the main picture (col. 1, lines 49-51). Fujita discloses that in MPEG 2, data is reproduced synchronously, but that it is not sufficient to consider only the synchronization among individual pieces of data (col. 1, lines 25-37). Fujita further discloses that for educational purposes, such as learning languages, video data may be used to give questions to the users and sub-picture data, superimposed on the data, may be used to give answers to the users. In this case, it is significant to show answers after, and not before or during, the time questions are given (col. 1, lines 38-43).

From the disclosure of Fujita, we find that Fujita is not related to operation in a fast play mode, is not directed to skipping sub-picture data if the SCR time is greater than the command executing start time, and delays the display of sub-picture data, except in instances where a menu is displayed to allow a user to select a lesson (col. 10, line 56 through col. 11, line 6). In addition, we find the Fujita is not directed to the same problem as appellant, i.e., simultaneously decoding at high speed video and sub-picture data by skipping the current display control sequence if the updated system clock reference value is greater than the command executing start time.

Turning to Daum, we agree with the examiner that Daum discloses skipping or repeating video frames when the video lags behind the audio by a predetermined amount. In addition, we find that Daum is directed to synchronizing audio and video data during MPEG decoding, and that alternatively, the audio can be delayed by a number of frames to allow the video to catch up (col. 26, lines 22-24). Moreover, although Daum discloses a/v playback in a fast forward mode (col. 19, lines 28-35), Daum provides no explanation of how this will be carried out. Thus, we find that Daum does not disclose the synchronization of sub-pictures, and does not disclose how a decoding in a fast forward mode will be carried out. In addition, we find that Daum is not directed to solving the same problem as appellant, i.e., simultaneously decoding at high speed video and sub-picture data by skipping the current display control sequence if the updated system clock reference value is greater than the command executing start time.

Turning to Tsukagoshi, we agree with the examiner that the reference is directed to reproducing subtitles (sub-pictures) in a fast reproduction mode. However, from our review of Tsukagoshi we agree with appellant (reply brief, page 2) that "the subtitles to be displayed are not the subtitles which would be displayed in



a normal mode but are subtitles which are especially constructed to be played back during the trick play mode." We find from our review of Tsukagoshi that the reference is directed to decoding subtitles to be displayed exclusively during the trick playback mode by reading out the subtitle from a subtitle address stored on the record medium (col. 3, lines 18-22). From the disclosure of Tsukagoshi, we find that the subtitle data is transferred from code buffer 22-1 to the display memory 22-2 when the subtitle portion of the PTS is aligned with the SCR (col. 7, lines 17-23). Tsukagoshi further discloses that the subtitles displayed in trick playback mode may be of different textual content from the normal playback subtitles (col. 11, lines 29-31) and adds that the trick mode playback subtitles may be played back without the normal playback subtitles or the video picture, which allows the viewer to scan only the trick mode subtitles (col. 11, lines 31-37). We agree with the examiner's assertion (answer, page 13) that the disclosure in Tsukagoshi that the subtitles for a trick play mode may be different textual context from the subtitles for a normal playback mode, does not mean that the subtitles for trick playback mode are always different from the subtitles designated for normal replay mode. However, we find that this is not a suggestion of skipping any of the subtitles. We do not

agree with the examiner (id.) that Daum's teaching of synchronization to correct for time drift is a teaching of skipping subtitle data, as the examiner has advanced no convincing line of reasoning as to why an artisan would have been motivated to skip any of the trick playback subtitles in Tsukagoshi. From the disclosure of Tsukagoshi, we agree with appellant that although Tsukagoshi is directed to reproducing subtitles with video data, that because the subtitles have been preselected and placed in memory, there is no suggestion to skip any of the subtitles, and in particular, no suggestion to skip a subtitle if the time of the SCR is greater than the command executing start time of the subtitle (sub-picture). Thus, although we find that Tsukagoshi is directed to reproducing subtitles with video at high speed, we find that Tsukagoshi is also not directed to the problem appellant is solving, i.e., simultaneously decoding at high speed video and sub-picture data by skipping the current display control sequence if the updated system clock reference value is greater than the command executing start time. In addition, we find no suggestion, as advanced by the examiner, to set the lag threshold in Daum to zero to result in the video to be skipped if the SCR exceeded the command executing start time.

Nor are we persuaded by the examiner's assertion (answer, pages 11 and 12) that:

The examiner believes that the teaching of Daum et al., wherein the audio is dominant and the sub-picture is subservient, can be applied by one of ordinary skill in the art to an invention in which the main picture is dominant and the sub-picture is subservient. As taught by Daum et al, the audio is dominant to the video because the skipping of an audio frame is more noticeable than the skipping of a video frame (col. 6, lines 1-13). Using the same line of reasoning, it would have been obvious to have the main picture dominant and the sub-picture subservient because the skipping of a main picture is more noticeable than the skipping of sub-picture data because a main picture provides images for the entire video display, whereas sub-picture data only provides images for a portion of the video display. The teaching of Daum et al suggest skipping the subservient data; therefore, the sub-picture data is skipped since it is subservient to the main video data.

Although we agree with the examiner that in a broad sense, the issue of "dominant" audio and "subservient" video relates to video and sub-pictures, we find insufficient connection between Fujita and the teachings of Daum to apply the teachings of Daum to Fujita. Nor are we persuaded by the examiner's assertion (answer, page 15) that the motivation to combine Tsukagoshi with Fujita and Daum is the "teachings of Tsukagoshi et al that show that subtitle data provides information related to the video

data." As is clear from our review of the prior art, subtitle data is related to the video data. If not, the subtitle data would not be provided. The fact that the subtitle data is related to the video data is not a reason to combine the teachings of Tsukagoshi with Fujita and Daum because the reason to combine the teaching of Fujita, Daum and Tsukagoshi, to arrive at appellant's invention, comes not from the prior art, but from appellant's disclosure.

From all of the above, we find that although the examiner has located all of the elements of the claimed invention in the prior art, that because none of the references is directed to the problem that appellant is solving, and do not suggest a different reason for combining the teachings of the references, we find that the only suggestion to combine the references comes from appellant's own disclosure and appellant's teaching of how to solve the problem decoding video data and sub-picture data simultaneously at high speed by "skipping the current display control sequence if the updated system clock reference value is greater than the command executing start time."

Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor. Para-Ordnance Mfg. v. SGS Importers Int'l, 73 F.3d 1085, 1087,

37 USPQ2d 1237, 1239 (Fed. Cir. 1995) (citing W.L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1551, 1553, 220 USPQ 303, 311, 312-13 (Fed. Cir. 1983)). "It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious." In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992) (citing In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991)). Accordingly, the rejection of claim 1 under 35 U.S.C. § 103(a) is reversed. In addition, as we do not agree with the combining of the references as advanced by the examiner, the rejection of claims 2-4, 6-13 and 15 under 35 U.S.C. § 103(a) is also reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1-4, 6-13 and 15 under 35 U.S.C. § 103(a) is reversed.

REVERSED

LEE E. BARRETT	)	
Administrative Patent Judge	)	
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	)	BOARD OF PATENT
STUART S. LEVY	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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HOWARD B. BLANKENSHIP	)	
Administrative Patent Judge	)	

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